

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTONTHE SPOTTED SKUNK OF THE CHANNEL
ISLANDS OF SOUTHERN CALIFORNIA.¹

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For many years Spotted Skunks of the genus *Spilogale* have been known from at least one of the islands of the Channel group, lying off the coast of southern California. Over twenty years ago, in fact, Howell in his revision of the genus² listed one specimen from Santa Cruz Island, Santa Barbara County, California, but the material remained scant indeed, if not unique, and the island animal has been assigned to *Spilogale phenax phenax* Merriam on general geographic grounds, without opportunity being afforded for critical study of specimens in series.

More recently the naming of *Spilogale phenax microrhina* from the San Diegan district by E. Raymond Hall³, and its separation from the coastal animal *phenax* of northwestern California, has lent added interest to the capture and study of the animal from these islands which have been isolated from the mainland for such untold centuries.

Luckily material in adequate series, particularly from Santa Rosa Island, has become available in the last year or so, largely through the efforts of H. H. Sheldon and Paul Trapier. Mr. Sheldon in particular has made a number of short trips to Santa Rosa and Santa Cruz Islands in my behalf. In the study of the resulting material comparative use has been made not only of some 37 specimens in local collections, but also a series of topotypes of both *phenax* and *microrhina* in the University of California collections. For the courteous opportunity of making

¹Contribution from the California Institute of Technology.

²N. A. Fauna 26, 1906, p. 32.

³Journal of Mammalogy, 7, no. 1, 1926, p. 53-56.

the latter comparisons my thanks are due Joseph Grinnell, Director, and E. Raymond Hall, Curator of Mammals in the Museum of Vertebrate Zoology.

Two additional skulls-without-skins from Santa Cruz Island have been kindly loaned me by D. B. Rogers of the Santa Barbara Museum of Natural History, and have supplemented our own limited series from that island in important fashion.

When this combined material was assembled for study it became quickly evident that the island animal does not closely resemble the San Diegan form *microrhina*, which pushes up the mainland at least as far as Ventura County. Instead, the Santa Rosa and Santa Cruz Island series which seem to differ from each other in no essential respect, are closer, particularly in tail proportion, rostral region and external nares, to the northern form *phenax*. Looking at a map of the California coast and remembering the persistence still on near-by San Miguel Island of the Northern Sea-Lion (*Eumetopias jubata*) and remembering, too, the presence on the adjacent mainland of Pleistocene remains of northern trees such as the Monterey Pine, etc., it need not surprise us unduly to find this isolated colony of skunks perpetuating to some extent the characters of the race which is now found in northwestern California. If it does not resemble the form *microrhina* now found on the near-by mainland of Ventura County, may it not at least logically be suggested that the latter has perhaps come in as an intrusive element, spreading north and west with the change of conditions from humid to more arid on that part of the coast.

Further study, however, shows that many differences set the island series off sufficiently from the closely related *phenax* to demand its naming. It may be known as follows:

***Spilogale phenax amphialus*, subsp. nov.**

CHANNEL ISLANDS SPOTTED SKUNK

Type.—Male adult; no. 13,400, collection of Donald R. Dickey; 2½ miles north of ranch house near coast, Santa Rosa Island, Santa Barbara County, California; November 6, 1927; collected by H. H. Sheldon; original no. 14.

Characters.—Externally the island animal has the short total length of *microrhina*, but differs strikingly from it in having the tail not long as in that form, but even shorter both actually and relatively than the short-tailed northern form *phenax*.

Cranially *amphialus* has a comparatively massive skull, nearer in general to *phenax* than to *microrhina*, but differing from *phenax* in being shorter and more compact posterior to the supraorbital processes, with sagittal and lambdoidal ridges developed into striking crests; mastoid bullae as viewed from the side rounder, more compact and sharply tilted upward posteriorly; dentition lighter throughout, canines shorter and line of cingulum closer to alveolar border.

Measurements of type.—Total length, 426 mm.; tail, 121; hind foot, 48. Skull: condylo-basal length, 57.1; occipito-nasal length, 51.0; width of opening of external nares, 6.8; zygomatic breadth, 37.8; greatest mastoid breadth, 33.9; interorbital constriction, 16.9; palatal length, 23.0; post-palatal length, 28.5; length of tooth row (c^1 to m^1 inc.), 18.6.

Range.—Santa Rosa and Santa Cruz Islands, Santa Barbara County, California. Association, chiefly cactus patches, on Santa Rosa at least.

Remarks.—Since intergradation with mainland species is now obviously impossible and since overlap in composite characters is not yet fully demonstrated, some might urge the desirability of describing *amphialus* as a species. However, the hiatus is so small as to lack significance in a group that is as variable as the Mustelids, and in addition, I am myself so convinced that *phenax* and *amphialus* are of common stock that the use of the trinomial gives to my mind a far truer picture of the situation.